Examiner

PTO/SB/08A (08-00) = Approved for use through 10/31/2002. OMB 6651-0031 U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

U.S. Patent am Typprovide of the fireful patents of the fireful pate

Substitute for form 1449APTO

INFORMATION DISCLOSURE
STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 1 of .2

Complete if Known

Application Number

Filling Date

First Named Inventor

Group Art Unit

Examiner Name

Attomacy Docket Number

UCS-6 (801-108)

				U.S. PATER	IT DOCU	MENTS					
xaminer	Cite	U.S. Pater	t Document	Name of Patentee or A	nolicant	Date of Publication of		Pages,	Pages, Columns, Lines, Where Relevant.		
nitials*	No.1	Number	Kind Code ²	of Cited Docume		MM-DD-Y		Passa	ges or Rele		
	AA. AB. AC.	5,39	1,056 1,841 0,118	Nohr et al Quick Adair et al		Dec. 18, Feb. 21, March 20	1995	347/102 174/258 430/138			
			1								
				•							
							-				
							1.				

					EIGN PATENT DOCUMEN	13			,
	01-	l	Foreign Patent Do		Name of Patentee or	Date of Publication of	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear		1
xaminer nitials	Cite No.1	Office ³	Number ⁴	Kind Code ⁵ (if known)	Applicant of Cited Document	Cited Document MM-DD-YYYY			γs
	AD.	EP	0 417 2		S	March 20, 1991			
- 1	AE.	JP JP	2000-100	1101 (with	English-abstract)	April 11, 2000 Dec. 21, 1999			
	AG.	WO	00/1019		grish-abstract/	Feb. 24, 2000			
	AH.	WO			lish-aþstract)	Oct. 21, 1999			
								Ť	

٤	Signatun	е									Con	sidered					
*EX	AMINER:	Initial	f reference	considered	whether	or not	citatio	is in e	conformani	e with MPE	P 609.	Draw line	through ci	itation if no	ot in conform	ance and n	ot

Date

considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter

*Unique citation designation number. *See attached Kinds of U.S. Patient Documents. *Enter Cillice that issued the document, by the two-foundable code (WRDO Sandard ST.3.* *For Japanese patient documents, the indication of the year of the neigh of the Empirice must precede the serial number of the patient document. *Kind of occurrent by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. *Application is to place a charging large lar

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office. Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO. Assistant Commissioner for Patents, Washington, DC 20231.

PTO/SB/08B (08-00)	
10/31/2002. OMB 0651-0031	
DARTMENT OF COMMERCE	

Substitu	ite for form 1449B/PTO		Complete if Known					
			Application Number					
INF	ORMATION	DISCLOSURE	Filing Date					
STA	TEMENT B	Y APPLICANT	First Named Inventor	Constantine P.				
017	CIEMENT D	I AI I LIOANI	Group Art Unit					
	(use as many sh	eets as necessary)	Examiner Name					
Sheet	2	of 2	Attorney Docket Number	UCB-6 (B01-108)				

		OTHER PRIOR ART NON PATENT LITERATURE DOCUMENTS	
Examiner Initials	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the model, and appropriate), title of them (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue rumi publisher, city and/or country where published.	
	AI. AJ.	solutions", Applied Physics Letters, Vol. 82, No. 20, 19 May 2003 N.R. Bieri et al. "Manufacturing of Rlectrically Conductive Microst Dropwise Printing and Laser Curing of Ranoparticle Suspensions", IMECES002, ASME International Mechanical Engineering Congress & E (© 2002 ASME), November 17-22, 2002, New Orleans, Louisiana, pp.	, pp. 3529-3531. ructures by Proceedings of Exposition, 1-8.
	AL.	Physical Review A, Vol. 13, No. 6, June 1976, pp. 2287-2298.	particles",
	AM.	Vol. 139, pp. 173-191	dings IBEE 13th
	AO.		echanical 1, February 2002
	AP.	G.V. Shivashankar et al, "Biomolecular recognition using submicron lithography", Applied Physics Letters, Vol. 73, No. 3, 20 July.19 American Institute of Physics), pp. 417-427.	98 (9 1998
	AQ.	John B. Szczech et al, "Fine-Line Conductor Manufacturing Using Drc Printing Technology", IEBE Transactions on Electronics Packaging Vol. 25, No. 1, January 2002 (* 2002 IEEE), pp. 26-33.	
			,
			÷
			-
		* * * * * * * * * * * * * * * * * * * *	>

Examiner	Date	-	
Signature	Considered	·	Ī

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this from should be sent to the Chief Information Officer, U. S. Patient and Trademank Office, Washington, DC 30231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patients, Washington, DC 30231.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

PATENT APPLICATION

Applicants: Constantine P. GRIGOROPOULOS,
Nicole Reneé BIERI,
Dimos POULIKAKOS,
Jaewon CHUNG

Atty. Doc.: UCB-6(B01-108)

Serial No.:

Filed:

Group Art Unit:

Confirmation No.:

Examiner:

Title: A METHOD FOR PRODUCING A STRUCTURE USING NANOPARTICLES

Mail Stop Patent Application Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

SIR:

DISCLOSURE STATEMENT

The applicants respectfully request that the following references be considered in the examination of the above-identified application. A copy of each reference is enclosed.

United States Patents

Patent Number Inv	rentor Date	Issued	Class
AA. 6,331,056 Noh	r et al Dec.	18, 2001	347/102
AB. 5,391,841 Qui	ck Feb.	21, 1995	174/258
AC. 4,910,118 Ada	ir et al Marc	h 20, 1990	430/138

European Published Patent Application

 Publication No.
 Publication Date

 AD. 0 417 294
 March 20, 1991

Japanese Published Patent Applications

 Publication No.
 Publication Date

 AE. 2000-104101
 April 11, 2000

 AF. 11-350107
 Dec. 21, 1999

International Published Patent Applications

 Publication No.
 Publication Date

 AG. WO 00/10197
 Feb. 24, 2000

 AH. WO 99/53738
 Oct. 21, 1999

Publications

- AI. N.R. Bieri et al, "Microstructuring by printing and laser curing of nanoparticle solutions", Applied

 Physics Letters, Vol. 82, No. 20, 19 May 2003, pp. 3529-3531.
- AJ. N.R. Bieri et al, "Manufacturing of Electrically
 Conductive Microstructures by Dropwise Printing and
 Laser Curing of Nanoparticle-Suspensions",
 Proceedings of IMECE2002, ASME International
 Mechanical Engineering Congress & Exposition, (© 2002
 ASME), November 17-22, 2002, New Orleans, Louisiana,
 pp. 1-8.
- AK. D.B. Bogy et al, "Experimental and Theoretical Study of
 Wave Propagation Phenomena in Drop-on-Demand Ink Jet
 Devices", IBM J. Res. Develop., Vol. 28, No. 3,
 May 1984, pp. 314-321.

- AL. Ph. Buffat et al, "Size effect on the melting temperature of gold particles", <u>Physical Review A</u>, Vol. 13, No. 6, June 1976, pp. 2287-2298.
- AM. J.F. Dijksman, "Hydrodynamics of small tubular pumps", J. Fluid Mech. (1984), Vol. 139, pp. 173-191.
- AN. Sawyer Fuller et al, "Ink Jet Fabricated Nanoparticle

 Mems", Proceedings IEEE 13th Annual International

 Conference of Micro Electro Mechanical Systems IEEE

 2000, Piscataway, NJ (* 2000 IEEE), pp. 138-141.
- AO. Sawyer B. Fuller et al, "Ink-Jet Printed Nanoparticle
 Microelectromechanical Systems", <u>Journal of</u>
 Microelectromechanical Systems, Vol. 11, No. 1,
 February 2002 (© 2002 IEEE), pp. 54-60.
- AP. G.V. Shivashankar et al, "Biomolecular recognition using submicron laser lithography", Applied Physics

 Letters, Vol. 73, No. 3, 20 July 1998 (* 1998)

 American Institute of Physics), pp. 417-427.
- AQ. John B. Szczech et al, "Fine-Line Conductor

 Manufacturing Using Drop-On-Demand PZT Printing

 Technology", IEEE Transactions on Electronics

 Packaging Manufacturing, Vol. 25, No. 1, January 2002

 (© 2002 IEEE), pp. 26-33.

REMARKS

Under rule 37 C.F.R. 1.98(a) (effective March 16, 1992), since the above-cited references (AA-AD, AG and AI-AQ) are in the English language, the applicants submit that no specific comments are necessary for any of these. An English-language abstract accompanies References AE, AF and AH.

For the Examiner's convenience, the applicants have attached a completed modified Form PTO/SB/08A-B hereto.

Respectfully submitted,

July 15, 2003

Peter I Michaelson Att

Peter L. Michaelson, Attorney

Reg. No. 30,090 Customer No. 007265 (732) 530-6671

MICHAELSON & WALLACE Counselors at Law Parkway 109 Office Center 328 Newman Springs Road P.O. Box 848 Red Bank, New Jersey 07701

EXPRESS MAIL CERTIFICATION

"Express Mail" mailing label number: EL913826956US Date of deposit: July 16, 2003

I hereby certify that this paper or fee is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to:

Mail Stop Patent Application Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

1 eta Chercarlar

Signature of person making certification

Peter L. MICHAELSON
Name of person making certification

(UCB6DCST/5:ca)